

Appl. No. 10/686,474
Reply to Office Action of December 16, 2005

Docket No. MOIS-014AUS

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the amendments set forth above and the remarks below.

Claims 1-37 are pending in the application; claims 20-24 and 33-37 are allowed; claims 27 and 28 are objected to; and claims 1-19, 25, 26, and 29-32 are rejected.

Claims 1, 8, 15, 18, 19, 25, and 27 are herein amended.

The specification is amended as set forth above to correct some typographical errors identified by the Applicant.

Applicant would like to thank the Examiner for the courtesy extended to Applicant and Applicant's representative in a telephone interview on March 21, 2006. During the interview the Watrous and Ilic references were discussed. In particular, claim amendments to clarify that the load is electrically disconnected from the rails were discussed. Applicant discussed the technical operation of the circuits disclosed by Watrous and Ilic and how these references do not teach or suggest electrically disconnecting a load from the rails. While Applicant and Applicant's representative believe the interview was helpful in distinguishing the invention over the cited references and moving forward on the case, no agreement was reached.

The §112 Rejections

The Examiner rejects claims 1-19 under 35 U.S.C. §112, second paragraph, as being indefinite. With regard to claim 1, while the §112 rejection was not explicitly discussed, Applicant believes that the claim language and circuit operation was discussed during the telephone interview of March 21st so as to render the rejection moot.

With regard to claims 15 and 18, these claims are rewritten to remove the terms "conventional," "black," and "white."

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Accordingly, Applicant believes the §112 rejections have been overcome.

The Prior Art Rejections

The Examiner rejects Claims 1-2, 7, 14-15, 17-18, 25-26 and 29 under 35 U.S.C. §102(b) as being anticipated by Watrous (U.S. Patent No. 4,030,013).

Claim 1 is amended to require a power management circuit including a first power control circuit coupled to the first switching element, wherein the first power control circuit biases the first switching element to a non-conductive state for a portion of a half cycle of an AC signal for electrically disconnecting the load from the first and second rails during which a peak voltage of the AC half cycle occurs when a voltage across the first and second rails is greater than a predetermined threshold. With this arrangement, by removing the load from the rails while an AC signal is above a threshold, as shown in FIGs. 5A and 5B, peak charging of storage elements is eliminated so that a non-linear load can be energized in a stable and efficient manner.

As discussed during the interview, Watrous discloses a conventional inverter circuit that provides AC line sensing. However, Watrous does not disclose or suggest electrically disconnecting the load from the rails, as required by amended claim 1.

In view of the above, Applicant submits that claim 1 is patentably distinguishable over Watrous. For at least the same reasons, Applicant submits that claims 2-19 are also distinguishable over Watrous.

The Examiner rejects claims 25-26 and 29 under 35 U.S.C. §102(e) as being unpatentable over Ilic (U.S. Patent number 6,473,284).

Claim 25 is amended to require a method of managing power in a circuit including selecting a voltage threshold at which an AC signal will be clamped such that a switching element for energizing a load is biased to a non-conductive state during a time that the AC signal is above

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the voltage threshold such that the load is electrically disconnected from first and second rails when the AC signal is above the voltage threshold. This amendment is substantially similar to the amendment of claim 1.

As discussed during the interview, Applicant submits that Ilic, like Watrous, does not teach electrically disconnecting a load from the rails. In particular, looking to Figure 1 of Ilic it can be seen that the clamping scheme including switches Q2 and Q3 does not electrically disconnect a load from the rails, as required by claim 1. Rather, Ilic simply clamps the voltage seen by the load.

In view of the above, Applicant submits that claim 25, as amended, is patentably distinguishable over Ilic. Applicant further submits that claim 26 is also distinguishable as depending from the claim 25.

Claims 3, 6, and 30-32 are rejected under 35 U.S.C. §103 over Watrous in view of Applicant's admitted prior art. Claims 10 and 13 are rejected under §103 over Watrous. Claims 16 and 19 are rejected under §103 over Watrous in view of U.S. Patent No. 5,867,358 to Campbell. And claims 30-32 are rejected under §103 over Ilic in view of Applicant's admitted prior art.

Applicant believes these rejections are rendered moot in view of the claim amendments and remarks regarding amended claim 1 and claim 25.

In view of the above, Applicant believes claims 1-37 are patentably distinguishable over the cited references. Accordingly, a notice of allowance for these claims is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Response or this application.

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Applicant does not acquiesce to any assertion made by the Examiner not specifically addressed herein.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

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Respectfully submitted,

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